	Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal (Includes 10% Markup for Subcontractors)		
Р	PROJECT COORDINATION AND SCHEDULING						
	<u>Prime Contractor Costs</u> - Obtain subcontractor quotes to implement closure activities	Project Manager	\$116	6	\$69		
	<ul> <li>Coordinate scope and schedule of project activities with owner/operator, decontamination contractor, regulatory agencies and analytical laboratory</li> </ul>	Project Manager	\$116	4	\$46		
	- Review facility permit and closure plan	Project Engineer Field Supervisor	\$99 \$76	6 12	\$59- \$91:		
	- Prepare project/site specific Health and Safety Plan	Health/Safety Specialist	\$99	6	\$59-		
	<ul> <li>Participate in on-site coordination and orientation meeting with owner/operator and decontamination contractor</li> </ul>	Project Manager	\$116	2	\$23		
	- Prepare project activity and project status reports	Project Manager	\$116	4	\$46		
	- Office Expenses - Miscellaneous Expenses		\$127 \$127	1 1	\$123 \$123		
	Activit	y 1. Subtotal			\$4,210		
<u>A</u>	OBILIZE TO SITE AND PREPARE FOR CLOSURE/CLOSURE OVERSIGHT <u>ssumptions</u> Waste solvent tank is full (15,000 gallons)  Permitted capacity of CSA (4,500 gallons), Return and Fill Station (224 gallons), and Flammable Materials Shelter (3,300 gallons) is 8,024 gallons (146 55-gallon drums)  Waste solvent transported to Aragonite, UT. Unit cost is based on \$165 per 55-gallon drum, and \$0.06/pound of bulk waste parts washer solvent, and includes treatment and disposal.  Generator knowledge used for disposal/treatment of waste solvent and spent antifreeze (i.e. no sampling required). However, 2 waste characterization samples are conservatively included.  Waste haulers costs to transport drums to reclaimer based on RS Means. Documentation of unit costs provided in notes at the end of the cost estimate  Prime Contractor per diem includes rental car, room and meals  Subcontractor costs include labor and all expenses to complete each task  Onsite closure activities completed in 7 working days, Project Engineer on site for 4 days for inspection/closure activities						
	Owner/Operator Costs - Closure project supervision and oversight	Remediation Manager	\$5,063	LS	\$5,06		
	Britan Control Control						

Owner/Operator Costs - Closure project supervision and oversight	Remediation Manager	\$5,063	LS	\$5,063
Prime Contractor Costs - Project Management and Supervision	Project Manager	\$116	2	\$232
- Supervise waste loading activities	Field Supervisor Travel Per diem (all activities)	\$76 \$949 \$190	10 1 7	\$760 \$949 \$1,330
- Collect representative waste characterization sample of drummed wastes	Field Supervisor Supplies/Shipping	\$76 \$190	1 1	\$76 \$190
<u>Subcontractor Costs</u> - Subcontractor mobilization/demobilization and licensing	Lump Sum	\$12,656	LS	\$13,922
- Transfer tank contents to tankers	Foreman/labor/equipment	\$3,670	LS	4,037
- Transport waste solvent to a TSD for treatment/disposal Assumes 3 trucks to transport 15,000 gallons (5000 gallon/tanker) Bulk Transportation at \$823/load Tanker Washout Fee at \$253/load 15000 gallons = 120,000 pounds	Bulk Transportation Tanker Washout Fee	\$823 \$253	3 3	\$2,469 \$759
Disposal at \$0.06/pound	TSD(cost per lb)	\$0.06	120000	\$7,200
- Transfer drums in CSA to trucks	Foreman/labor/equipment	\$462	LS	\$508
- Transport drums to TSD for Treatment/Disposal Assumes 3 trucks to transport 146 drums (60/trailer) Drum Transportation at \$499/load Aragonite State Fees - fee structure has changed, but assume an equivalent cost Estimated disposal/treatment cost (per drum) - \$162/drum	Drum Transport State Fees Disposal of drums	\$506 \$165	3 146	\$1,497 \$3,615 \$24,090
Laboratory Subcontractor Costs - Waste characterization sample analysis Waste characterization analysis to consist of TCLP VOCs, SVOCs and Metals		\$794	2	\$1,588

Activity 2. Subtotal

3.	STORAGE TANK DECONTAMINATION AND REMOVAL (1 Tank)

STORAGE TANK DECONTAMINATION AND REMOVAL (1 Tank)  Assumptions:  - Tank and appurtenant equipment are removed and scrapped  - Rinsate sampling is not necessary because the tanks will be scrapped  - Prime Contractor field supervisor travel is accounted for in above activity  - Prime Contractor per diem includes rental car, room and meals  - Assumes secondary containment removed  - Assumes collection of 2 soil samples from beneath waste solvent containment area is necessary  - Subcontractor costs include labor and all expenses to complete each task				
Prime Contractor Costs				
- Project Management and Supervision	Project Manager	\$116	4	\$464
- Supervise Storage Tank Decontamination and Removal Activities	Field Supervisor	\$76	20	\$1,520
- Inspect Secondary Containment	Project Engineer	\$99	4	\$396
	Travel Per diem	\$949 \$190	1	\$949 \$760
			•	•
- Collect soil samples	Field Supervisor Sample supplies/shipping	\$76 \$190	4 LS	\$304 \$190
	cample cappines in pping	ψ.00	20	ψ.00
Subcontractor Costs - Disconnect electrical appurtenances	Labor/equipment	\$570	LS	\$627
		• • •		• •
<ul> <li>Decontaminate 1 waste AST, 80' piping and Containment Area         Washtriple rinse tank, piping and containment with high pressure spray         Remove wash/rinse water, containerize in drums         Cost for transportation and wash water disposal included in activity 8 below</li> </ul>	Foreman/labor/equipment	\$2,658	LS	\$2,924
- Demolish 1 AST and piping, haul for remelt	Foreman/labor/equipment	\$2,215	LS	\$2,437
- Demolish Containment Area, load concrete for disposal/recycling	Foreman/labor/equipment Disposal/Recycling (26 cubic yards)	\$8,227 \$20	LS YD	\$9,050 \$572
Laboratory Subcontractor Costs	Disposal/Hooyeling (20 cubic yards)	ΨΣΟ	10	ΨΟΙΣ
- Analyze 2 soil samples for VOCs, SVOCs, and Metals	VOCs @ \$127/sample SVOCs @ \$266/sample Metals @ \$114/sample EnCore Sample Container @ \$30/sample			
	Total per sample cost	\$567	2	\$1,247
Activity 3. Subto	otal			\$21,440

\$68,285

	Activity	Н ,	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal (Includes 10% Markup for Subcontractors)
DECONTAMINATE ONE CONTAINER STORAGE AREA Assumptions:	, wany	Outogory	J.m. Onlargo	Louinato	ioi Gaboonii adioidj
CSA located inside warehouse and consists of a concrete slab f Decontamination shall consist of washing with a high-pressure c CSA to remain in-place following closure Prime Contractor project engineer and field supervisor travel ac Prime Contractor per diem includes renatl car, room and meals Assumes up to 2 soil samples will be collected from beneath th Field supervisor qualified to collect soil and rhinsate samples Subcontractor costs include labor and all expenses to complete	etergent/water solution and triple rinsing with tap counted for in above activities e CSA	840 sq. ft. water			
Prime Contractor Costs - Inspect the floor of CSA for cracks, gaps, or othe lapses of integrity	r potential	Project Engineer	\$99	2	\$198
- Fill cracks and gaps (if necessary) prior to impler	nenting decontamination	Field Supervisor	\$76	2	\$152
- Supervise and document decontamination of CS	4	Field Supervisor	\$76	6	\$456
- Collect sample of final rinsate from CSA, submit	for laboratory analysis	Field Supervisor	\$76	2	\$152
- Core through concrete at 2 locations beneath CS	A	Field Supervisor Equipment	\$76 \$127	2 day	\$152 \$127
- Collect 2 soil samples beneath CSA for analysis	of VOCs, SVOCs and metals	Field Supervisor Sample supplies/shipping	\$76 \$380	4 LS	\$304 \$380
	t/water solution, and scrubbing with brooms, mop y. Wash/rinse water containerized and transferred ums included in Activity 8 below.		\$1,139	LS	\$1,253
<u>Laboratory Subcontractor Costs</u> - Analyze 1 rinsate sample for VOCs and SVOCs		VOCs @ \$127/sample SVOCs @ \$253/sample			
- Analyze 2 soil samples for VOCs, SVOCs and M	etals	Total per sample cost  VOCs @ \$127/sample  SVOCs @ \$266/sample  Metals @ \$114/sample	\$380	1	\$418
		EnCore Sample Container @ \$30/sample Total per sample cost	x 2/sample \$567	2	\$1,247
	Activity 4. Subtota	d .			\$4,839
DECONTAMINATE THE RETURN/FILL STATION <u>Assumptions</u> : Washing shall consist of a high-pressure detergent/water solutic triple rinsing with tap water - The R/F structure, including the dumpsters/drum washers will b - Drum washers shall be removed from the R/F and staged within	e saved for reuse				
- Rinsate sample required for drum washers (2) and secondary or Assumes up to 2 soil samples will be collected from beneath that - Prime Contractor project engineer and field supervisor travel and - Prime Contractor per d	ontainment (3 total) for VOCs and SVOCs return/fill containment area d per diem accounted for in above activities				
<ul> <li>Assumes up to 2 soil samples will be collected from beneath the</li> <li>Prime Contractor project engineer and field supervisor travel an</li> <li>Prime Contractor per diem includes rental car, room and meals</li> </ul>	ontainment (3 total) for VOCs and SVOCs return/fill containment area d per diem accounted for in above activities each task	Field Supervisor	\$76	4	\$30-
Assumes up to 2 soil samples will be collected from beneath the Prime Contractor project engineer and field supervisor travel an Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs	ontainment (3 total) for VOCs and SVOCs return/fill containment area d per diem accounted for in above activities each task dges (if necessary)		\$76 \$76	4 8	
Assumes up to 2 soil samples will be collected from beneath the Prime Contractor project engineer and field supervisor travel an - Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs     Supervise and document removal of residual slurations.	ontainment (3 total) for VOCs and SVOCs reterruffill containment area d per diem accounted for in above activities each task dges (if necessary) components (i.e. piping, pumps, and appurtenan			•	\$608
Assumes up to 2 soil samples will be collected from beneath ror Prime Contractor project engineer and field supervisor travel an - Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs     Supervise and document removal of residual slur - Supervise washing of R/F Station and associated.	ontainment (3 total) for VOCs and SVOCs return/fill containment area d per diem accounted for in above activities each task dges (if necessary) components (i.e. piping, pumps, and appurtenan es and photographs	c Field Supervisor	\$76	8	\$60E \$19E \$152
- Assumes up to 2 soil samples will be collected from beneath the Prime Contractor project engineer and field supervisor travel an - Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs  - Supervise and document removal of residual slut - Supervise washing of R/F Station and associated - Inspect containment and document with field not - Collect rinsate samples for analysis of VOCs and Subcontractor Costs  - Remove residual sludge from drum washers, derecontainment and structure Assumes decontamination with deterger and triple rinsing with high pressure spra	ontainment (3 total) for VOCs and SVOCs return/fill containment area of per diem accounted for in above activities each task dges (if necessary)  components (i.e. piping, pumps, and appurtenances and photographs  SVOCs  contaminate drum washers, grating, tiwater solution, and scrubbing with brooms, mog, Wash/rinse water containerized and transferrer	o Field Supervisor  Project Engineer  Field Supervisor Sample supplies/shipping  Foreman/labor/equipment s, etc.,	\$76 \$99 \$76	8 2 2	\$608 \$196 \$152 \$152
- Assumes up to 2 soil samples will be collected from beneath Prime Contractor project engineer and field supervisor travel an - Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs  - Supervise and document removal of residual slur - Supervise washing of R/F Station and associated - Inspect containment and document with field not - Collect rinsate samples for analysis of VOCs and Subcontractor Costs  - Remove residual sludge from drum washers, decontainment and structure  - Assumes decontamination with deterger	ontainment (3 total) for VOCs and SVOCs return/fill containment area of per diem accounted for in above activities each task dges (if necessary)  components (i.e. piping, pumps, and appurtenances and photographs  SVOCs  contaminate drum washers, grating, tiwater solution, and scrubbing with brooms, mog, Wash/rinse water containerized and transferrer	o Field Supervisor  Project Engineer  Field Supervisor Sample supplies/shipping  Foreman/labor/equipment s, etc., t to drums  VOCs @ \$127/sample	\$76 \$99 \$76 \$190	8 2 2 LS	\$608 \$198 \$152 \$190
- Assumes up to 2 soil samples will be collected from beneath the Prime Contractor project engineer and field supervisor travel an - Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs  - Supervise and document removal of residual slut - Supervise washing of R/F Station and associated - Inspect containment and document with field not - Collect rinsate samples for analysis of VOCs and Subcontractor Costs  - Remove residual sludge from drum washers, decontainment and structure Assumes decontamination with deterger and triple rinsing with high pressure spra Cost for transportation and disposal of duals and Laboratory Subcontractor Costs  - Laboratory Subcontractor Costs	ontainment (3 total) for VOCs and SVOCs return/fill containment are at d per diem accounted for in above activities each task dges (if necessary)  components (i.e. piping, pumps, and appurtenances and photographs  SVOCs  contaminate drum washers, grating, twater solution, and scrubbing with brooms, mog Wash/kinse water containerized and transferred ums included in Activity 8 below.	c Field Supervisor  Project Engineer  Field Supervisor Sample supplies/shipping  Foreman/labor/equipment s, etc., t to drums  VOCs @ \$127/sample SVOCs @ \$253/sample Total per sample cost	\$76 \$99 \$76 \$190	8 2 2 LS	\$304 \$608 \$198 \$152 \$190 \$4,037
- Assumes up to 2 soil samples will be collected from beneath the Prime Contractor project engineer and field supervisor travel an - Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs  - Supervise and document removal of residual slut - Supervise washing of R/F Station and associated - Inspect containment and document with field not - Collect rinsate samples for analysis of VOCs and Subcontractor Costs  - Remove residual sludge from drum washers, derecontainment and structure  Assumes decontamination with deterger and triple rinsing with high pressure spra Cost for transportation and disposal of d Laboratory Subcontractor Costs  - Analyze 3 rinsate sample for VOCs and SVOCs	ontainment (3 total) for VOCs and SVOCs return/fill containment are at d per diem accounted for in above activities each task dges (if necessary)  components (i.e. piping, pumps, and appurtenances and photographs  SVOCs  contaminate drum washers, grating, twater solution, and scrubbing with brooms, mog Wash/kinse water containerized and transferred ums included in Activity 8 below.	c Field Supervisor  Project Engineer  Field Supervisor Sample supplies/shipping  Foreman/labor/equipment s, etc., t to drums  VOCs @ \$127/sample SVOCs @ \$253/sample	\$76 \$99 \$76 \$190 \$3,670	8 2 2 LS LS	\$608 \$198 \$152 \$190 \$4,037
- Assumes up to 2 soil samples will be collected from beneath the Prime Contractor project engineer and field supervisor travel an - Prime Contractor per diem includes rental car, room and meals - Subcontractor costs include labor and all expenses to complete Prime Contractor Costs  - Supervise and document removal of residual slut - Supervise washing of R/F Station and associated - Inspect containment and document with field not - Collect rinsate samples for analysis of VOCs and Subcontractor Costs  - Remove residual sludge from drum washers, derecontainment and structure  Assumes decontamination with deterger and triple rinsing with high pressure spra Cost for transportation and disposal of d Laboratory Subcontractor Costs  - Analyze 3 rinsate sample for VOCs and SVOCs	ontainment (3 total) for VOCs and SVOCs return/fill containment are at d per diem accounted for in above activities each task dges (if necessary)  components (i.e. piping, pumps, and appurtenances and photographs  SVOCs  contaminate drum washers, grating, twater solution, and scrubbing with brooms, mog Wash/kinse water containerized and transferred ums included in Activity 8 below.	c Field Supervisor  Project Engineer  Field Supervisor Sample supplies/shipping  Foreman/labor/equipment s, etc., to drums  VOCs @ \$127/sample SVOCs @ \$253/sample Total per sample cost  VOCs @ \$127/sample SVOCs @ \$2568/sample Metals @ \$114/sample EnCore Sample Container @ \$30/sample Total per sample cost	\$76 \$99 \$76 \$190 \$3,670 \$380 x 2/sample	8 2 2 LS LS	\$608 \$198 \$152 \$190 \$4,037

	Activity  INATE FLAMMABLE MATERIALS STORAGE SHELTER	Category	Unit Charge	Estimate	for Subcontractors)	
Assumptions - Flammable	Ematerials storage shelter consists of a metal structure with elevated grating and metal co	ontainment pans.				
- Decontamination shall consist of washing with a high-pressure detergent/water solution and triple rinsing with tap water - Flammable materials storage shelter each to remain in-place following closure - Prime Contractor project engineer and field supervisor travel accounted for in above activities						
<ul> <li>Assumes up</li> <li>Field super</li> </ul>	ractor per diem includes rental car, room and meals p to 2 soil samples will be collected from beneath the flammable materials storage shelte visor qualified to collect soil and rinsate samples tor costs include labor and all expenses to complete each task	ır				
	e <u>Contractor Costs</u> Inspect the floor of the Flam Shed for cracks, gaps, or other potential		****			
	lapses of integrity	Project Engineer	\$116	2	\$2	
	- Fill cracks and gaps (if necessary) prior to implementing decontamination	Field Supervisor	\$76	2	\$1	
	- Supervise and document decontamination of Flam Shed	Field Supervisor	\$76	6	\$4	
	- Collect sample of final rinsate from Flam Shed, submit for laboratory	Field Supervisor	\$76	2	\$1	
	- Core through concrete at 2 locations beneath Flam Shed	Field Supervisor Equipment	\$76 \$127	2 day	\$1 \$1	
	- Collect 2 soil samples for analysis of VOCs, SVOCs and metals	Field Supervisor Sample supplies/shipping	\$76 \$380	4 LS	\$3 \$3	
Subco	ontractor Costs  Decontaminate 1 Flammable Materials Storage Shelter  Assumes decontamination with detergent/water solution, and scrubbing with the and triple rinsing with high pressure spray. Wash/rinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.	Foreman/labor/equipment prooms, mops, etc., d transferred to drums	\$2,658	LS	\$2,9	
Labor	ratory Subcontractor Costs					
	- Analyze 1 rinsate sample for VOCs and SVOCs	VOCs @ \$127/sample SVOCs @ \$253/sample				
	- Analyze 2 soil samples for VOCs, SVOCs and Metals	Total per sample cost	\$380	1	\$4	
		VOCs @ \$127/sample SVOCs @ \$266/sample Metals @ \$114/sample				
		EnCore Sample Container @ \$30/sam Total per sample cost	ple x 2/sample \$567	2	\$1,2	
Assumptions - Decontamir (i.e. equipm	IINATE CLEANUP EQUIPMENT (If Necessary) :: ation of Cleanup Equipment is not anticipated to be necessary. Equipment used to remo nent will not come into contact with hazardous waste). Other cleanup equipment such as	pressure washers will be cleaned during decontamina		ctive unit.	\$6,5	
Assumptions - Decontamir (i.e. equipm - If performed	IINATE CLEANUP EQUIPMENT (If Necessary)  andion of Cleanup Equipment is not anticipated to be necessary. Equipment used to remorent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solutions contractor Costs	we waste units will only be used following decontamina pressure washers will be cleaned during decontamina a and triple rinsing with tap water	tion of each respe	ctive unit.		
Assumptions - Decontamir (i.e. equipm - If performed	IINATE CLEANUP EQUIPMENT (If Necessary)  ation of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solutions  — Contractor Costs  — Supervise washing of cleanup equipment	we waste units will only be used following decontamina pressure washers will be cleaned during decontamina and triple rinsing with tap water  Field Supervisor	tion of each respension of each	4	\$3	
Assumptions - Decontamir (i.e. equipm - If performed	INATE CLEANUP EQUIPMENT (If Necessary)  antion of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution  contractor Costs  - Supervise washing of cleanup equipment  ontractor Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with the and triple rinsing with high pressure spray. Wash/rinse water containerized an	ve waste units will only be used following decontamine pressure washers will be cleaned during decontamine and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc.,	tion of each respe		\$3	
Assumptions - Decontamir (i.e. equipm - If performed	INATE CLEANUP EQUIPMENT (If Necessary)  antition of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution  contractor Costs  - Supervise washing of cleanup equipment  ontractor Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with the and triple rinsing with high pressure spray. Washrinse water containerized and Cost for transportation and disposal of drums included in Activity 8 below.	we waste units will only be used following decontamina pressure washers will be cleaned during decontamina and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., d transferred to drums	tion of each respension of each	4	\$3 \$6	
Assumptions - Decontamir (i.e. equipm - If performer - Prime - Subce	IINATE CLEANUP EQUIPMENT (If Necessary)  attain of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution  2 Contractor Costs  - Supervise washing of cleanup equipment  ontractor Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Autivity and triple rinsing with high pressure spray. Wash/rinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  Activ	ve waste units will only be used following decontamine pressure washers will be cleaned during decontamine and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc.,	tion of each respension of each	4	\$3 \$6	
Assumptions - Decontamir (i.e. equipm - If performed  Prime  Subce  CONTAINER  Assumptions - 1000 gallon - 1000 gallon - 500 gallon - 500 gallon - 520 gallons - 224 gallons - 250 gallons	INATE CLEANUP EQUIPMENT (If Necessary)  antition of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution.  2 Contractor Costs  - Supervise washing of cleanup equipment  Ontractor Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with the and triple rinsing with high pressure spray. Wash/rinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  Active  RIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  is wash water generated from decontamination of waste AST, piping and secondary contributed in the structure of CSA = 18 drums  is of wash water generated from decontamination of CSA = 18 drums  is of wash water generated from decontamination of drum fill station and drum washer = \$100 to wash water generated from decontamination of the properties of the structure of the present of the properties of	ve waste units will only be used following decontamine pressure washers will be cleaned during decontamine and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., d transferred to drums  iity 7. Subtotal  ainment (including residual sludge) = 18 drums	tion of each respension of each	4	\$3 \$6	
Assumptions - Decontamir (i.e. equipm - If performed - Prime - Subce  CONTAINER - Assumptions - 1000 gallon - 1000 gallon - 500 gallon - PPE, plastic - Waste char	INATE CLEANUP EQUIPMENT (If Necessary)  artiation of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution contact of a high-pressure detergent/water solution contractor Costs  - Construct Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with hand triple rinsing with high pressure spray. Wash/rinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  Activ  RIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  is wash water generated from decontamination of waste AST, piping and secondary conts of wash water generated from decontamination of cSA = 18 drums  of wash water generated from decontamination of return/fill station and drum washer = 8 studge removed from drum washer (included in above drum count)	ve waste units will only be used following decontamina pressure washers will be cleaned during decontamina and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., d transferred to drums  iity 7. Subtotal  ainment (including residual sludge) = 18 drums  of drums  of drums  nelter = 5 drums	\$76 \$633	4	\$3 \$6	
Assumptions - Decontamir (i.e. equipm - If performer  Prime  Subce  CONTAINER  Assumptions - 1000 gallon - 1000 gallon - 200 gallons - 224 gallons - 225 gallons - 226 gallons - 279 gallons - 280 gallons	INATE CLEANUP EQUIPMENT (If Necessary)  antion of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution   2 Contractor Costs  - Supervise washing of cleanup equipment  Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with the and triple rinsing with high pressure spray. Wash/rinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  Active  Active  Active  Active  Active TASE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  Sus wash water generated from decontamination of waste AST, piping and secondary contest of wash water generated from decontamination of return/fill station and drum washer = \$1 studge removed from drum washer (included in above drum count) is of wash water generated from decontamination of Peturn/fill station and drum washer = \$2 studge removed from drum washer (included in above drum count) is of wash water generated from decontamination of Flammable Materials Storage St sheeting, disposable cleanup equipment, consumables, etc. contained in 4 drums acterization samples not necessary for wash/water disposal (wash water from solvent tan	ve waste units will only be used following decontamina pressure washers will be cleaned during decontamina and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., d transferred to drums  iity 7. Subtotal  ainment (including residual sludge) = 18 drums  of drums  of drums  nelter = 5 drums	\$76 \$633	4	\$1,0	
Assumptions - Decontamir (i.e. equipm - If performer  Prime  Subce  CONTAINER  Assumptions - 1000 gallon - 1000 gallon - 200 gallons - 224 gallons - 225 gallons - 226 gallons - 279 gallons - 280 gallons	INATE CLEANUP EQUIPMENT (If Necessary)  Taiton of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution as Contractor Costs  - Contractor Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontraminate cleanup equipment  - Decontraminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with and triple rinsing with high pressure spray. Wash/rinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  Activ  RIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  is wash water generated from decontamination of waste AST, piping and secondary conts of wash water generated from decontamination of CSA = 18 drums  of wash water generated from decontamination of contamination and drum washer = 5 sludge removed from drum washer (included in above drum count)  of wash water generated from decontamination of both Flammable Materials Storage St is sheeting, disposable cleanup equipment, consumables, etc. contained in 4 drums acterization samples not necessary for wash/water disposal (wash water from solvent tarwater also disposed as hazardous waste)	we waste units will only be used following decontamina pressure washers will be cleaned during decontamina and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., d transferred to drums  ity 7. Subtotal  ainment (including residual sludge) = 18 drums  of drums  helter = 5 drums  k, R/F and containment disposed as hazardous waste	\$76 \$633	4 LS	\$3 \$6 \$1.0	
Assumptions - Decontamir (i.e. equipm - If performed  Prime  Subca  CONTAINER  Assumptions - 1000 gallon - 1000 gallon - 500 gallon - 500 gallon - 500 gallon - 500 gallon - 224 gallons - 225 gallons - PFE, plastic - Waste char CSA wash	INATE CLEANUP EQUIPMENT (If Necessary)  ination of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution as Contractor Costs  - Construct Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with the and triple rinsing with high pressure spray. Washrinse water containentzed and cost for transportation and disposal of drums included in Activity 8 below.  Activ  RIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  is wash water generated from decontamination of Waste AST, piping and secondary contributes of wash water generated from decontamination of CSA = 18 drums  of wash water generated from decontamination of return/fill station and drum washer included in above drum count)  of wash water generated from decontamination of both Flammable Materials Storage St is sheeting, disposable cleanup equipment, consumables, etc. contained in 4 drums acterization samples not necessary for wash/water disposal (wash water from solvent tan water also disposed as hazardous waste)  2 Contractor Costs  - Purchase 54 55-gallon drums  ontractor Costs  - Transfer drums of decon waste to trucks	ve waste units will only be used following decontamine pressure washers will be cleaned during decontamine and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., d transferred to drums  ainment (including residual sludge) = 18 drums  or drums  or drums  ity 7. Subtotal  ainment (including residual sludge) = 18 drums  or drums  or drums  ity drums  or d	\$76 \$633	4 LS	\$3 \$6 \$1.0	
Assumptions - Decontamir (i.e. equipm - If performed - Prime - Subcet  CONTAINER - Assumptions - 1000 gallon - 1000 gallon - 500 gallon - 500 gallon - 500 gallon - 250 gallon - 224 gallons - 250 gallon - 250 gallo	INATE CLEANUP EQUIPMENT (If Necessary)  Ination of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution as Contractor Costs  - Contractor Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with and triple rinsing with high pressure spray. Washfrinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  Activ  RIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  Is wash water generated from decontamination of waste AST, piping and secondary continuous wash water generated from decontamination of CSA = 18 drums  sof wash water generated from decontamination of return/fill station and drum washer (included in above drum count)  of wash water generated from decontamination of both Flammable Materials Storage St is sheeting, disposable cleanup equipment, consumables, etc. contained in 4 drums acterization samples not necessary for wash/water disposal (wash water from solvent tan water also disposed as hazardous waste)  • Contractor Costs  • Ensure drums are properly labeled, coordinate pick up and disposal  • Purchase 54 55-gallon drums  ontractor Costs  • Transfer drums of decon waste to trucks  • Transfer drums of Storage St drums (60/trailer)	we waste units will only be used following decontamina pressure washers will be cleaned during decontaminal and triple rinsing with lap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., of transferred to drums  with 7. Subtotal  ainment (including residual sludge) = 18 drums  or drums  be drums  characteristic forms  it R/F and containment disposed as hazardous waster  Project Manager  Drums @ \$44 each  Foreman/labor/equipment	\$76 \$633 e solvent, \$116 \$44	4 LS 4 54	\$3 \$6 \$1,0	
Assumptions - Decontamir (i.e. equipm - If performed  Prime  Subca  CONTAINER  Assumptions - 1000 gallon - 1000 gallon - 500 gallon - 500 gallon - 500 gallon - 500 gallon - 224 gallons - 250 gallon - PFE, plastic - Waste char CSA wash	INATE CLEANUP EQUIPMENT (If Necessary)  antion of Cleanup Equipment is not anticipated to be necessary. Equipment used to remo nent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution contractor Costs  - Contractor Costs  - Supervise washing of cleanup equipment  ontractor Costs  - Construct decon area with 6ml plastic sheeting and 4" absorbent berm  - Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with b and triple rinsing with high pressure spray. Wash/rinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  Activ  RIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  is wash water generated from decontamination of CSA = 18 drums of wash water generated from decontamination of return/fill station and drum washer of sudage removed from drum washer fincluded in above drum count)  so d wash water generated from decontamination of both Flammable Materials Storage Storabe cleanup equipment, consumables, etc. contained in 4 drums acterization samples not necessary for wash/water disposal (wash water from solvent tan water also disposed as hazardous waste)  2 Contractor Costs  - Ensure drums are properly labeled, coordinate pick up and disposal  - Purchase 54 55-gallon drums  ontractor Costs  - Transport drums of 5 docon waste to trucks  - Transport drums to TSD for Treatment/Disposal	we waste units will only be used following decontamina pressure washers will be cleaned during decontaminal and triple rinsing with lap water  Field Supervisor  Foreman/labor/equipment prooms, mops, etc., of transferred to drums  with 7. Subtotal  ainment (including residual sludge) = 18 drums  or drums  be drums  characteristic forms  it R/F and containment disposed as hazardous waster  Project Manager  Drums @ \$44 each  Foreman/labor/equipment	\$76 \$633 e solvent, \$116 \$44	4 LS 4 54	\$3 \$6 \$1,0 \$4 \$2,6	
Assumptions - Decontamir (i.e. equipm - If performed  Prime  Subca  CONTAINER  Assumptions - 1000 gallon - 1000 gallon - 500 gallon - 500 gallon - 500 gallon - 500 gallon - 224 gallons - 250 gallon - PFE, plastic - Waste char CSA wash	INATE CLEANUP EQUIPMENT (If Necessary)  ination of Cleanup Equipment is not anticipated to be necessary. Equipment used to remonent will not come into contact with hazardous waste). Other cleanup equipment such as d, washing of cleanup equipment shall consist of a high-pressure detergent/water solution and contact costs.  • Contractor Costs  • Construct decon area with 6ml plastic sheeting and 4" absorbent berm  • Decontaminate cleanup equipment  Assumes decontamination with detergent/water solution, and scrubbing with the and triple rinsing with high pressure spray. Washrinse water containerized an Cost for transportation and disposal of drums included in Activity 8 below.  **RIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES  is swash water generated from decontamination of waste AST, piping and secondary contributes of wash water generated from decontamination of cSA = 18 drums  sol wash water generated from decontamination of return/fill station and drum washer included in above drum county  sof wash water generated from decontamination of both Flammable Materials Storage St is sheeting, disposable cleanup equipment, consumables, etc. contained in 4 drums acterization samples not necessary for wash/water disposal (wash water from solvent tan water also disposed as hazardous waste)  • Contractor Costs  • Ensure drums are properly labeled, coordinate pick up and disposal  • Purchase 54 55-gallon drums  ontractor Costs  • Transport drums to TSD for Treatment/Disposal  Assumes 1 truck to transport 54 drums (60/trailer)  Drum Transportation at \$506/load  Estimated disposal/treatment cost (per drum) - \$165/drum	ve waste units will only be used following decontamine pressure washers will be cleaned during decontamine and triple rinsing with tap water  Field Supervisor  Foreman/labor/equipment or drams  or coms, mops, etc., d transferred to drums  itiy 7. Subtotal  ainment (including residual sludge) = 18 drums  or drums  elter = 5 drums  k, R/F and containment disposed as hazardous waste  Project Manager  Drums @ \$44 each  Foreman/labor/equipment (no charge, included in above costs)  Drum Transport	\$76 \$633 \$634 \$116 \$44 0	4 LS 4 54 LS	\$6,5 \$3( \$6) \$1,0( \$4( \$2,6) \$5,5 \$8,9	

Exhibit B-1. Closure Cost Estimate Worksheet, Hazardous Waste Units, Safety-Kleen Systems, Inc. Service Center, Salt Lake City, UT (5/03) - Costs Updated for Inflation to 2016
Hourly Rate or Hours

Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal (Includes 10% Markup for Subcontractors)
CLOSURE CERTIFICATION REPORT     Assumptions:     - CLOSURE CERTIFICATION REPORT certified by an Utah-registered PE and S-	К			, , , , , , , , , , , , , , , , , , ,
Prime Contractor Costs - Compile field notes and photographs	Project Manager Project Engineer	\$116 \$99	2 2	\$232 \$198
- Compile rinsate and soil sample data into summary tables	Project Manager Project Engineer	\$116 \$99	4 8	\$464 \$792
- Draft Closure Certification Report	Project Manager Project Engineer	\$116 \$99	8 16	\$928 \$1,584
- Prepare closure certification statement	Sr. Project Engineer	\$146	2	\$292
- Office Expenses - Miscellaneous Expenses	Drafting/Clerical Copying/Postage	\$506 \$127	1 1	\$506 \$127
	Activity 9. Subtotal			\$5,123
COST ESTIMATE ACTIVITIES SUMMARY  1. PROJECT COORDINATION AND SCHEDULING  2. MOBILIZE TO SITE AND PREPARE FOR CLOSURE/CLOSURE OVERSIGHT  3. STORAGE TANK DECONTAMINATION AND REMOVAL (1 Tank)  4. DECONTAMINATE ONE CONTAINER STORAGE AREA  5. DECONTAMINATE THE RETURN/FILL STATION  6. DECONTAMINATE FLAMMABLE MATERIALS STORAGE SHELTER  7. DECONTAMINATE CLEANUP EQUIPMENT (If Necessary)  8. CONTAINERIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION  9. CLOSURE CERTIFICATION REPORT	N WASTES			\$4,210 \$68,285 \$21,440 \$4,839 \$7,990 \$6,544 \$1,000 \$12,494 \$5,123
TOTAL CLOSURE COST ESTIMATE				\$131,925

- es:
   Prime Contractor Rates obtained from TriHydro Corporation 2003 Schedule of Charges
   Subcontractor prices provided by Evans Environmental Construction, Glenwood, Iowa
   10% markup on prime contractor, construction, and analytical contractor costs. No markup on disposal costs at Aragonite.
   Laboratory Subcontractor Rate Obtained From Analytical Service, Inc. (Norcross, Georgia) Schedule of Charges
   Waste solvents and drummed waste treatment/disposal unit cost obtained from Clean Harbors Aragonite, Utah Facility at \$165 per 55 gallon drum, and \$0.06/pound for bulk solvent.